the arms were completely paralyzed, and one day later, on the twenty-second day of the disease, the patient developed tranquil delirium and some hallucinations. She complained particularly of a sense of anguish if she looked at any clear space of considerable size in her neighborhood, having a kind of phobia for empty space. Up to this time the heart had remained normal. The following day, bulbar symptoms appeared, and there was tachycardia, and on the twenty-fourth day the patient died. The most important changes in the central nervous system were: first, the marked increase in the consistency of the brain and medulla. The dura mater of the cord was covered by a multitude of little glistening tumors containing a clear substance. The surface of the cord was irregular and nodular, as if constricted by the pia mater, which formed a number of irregular rings about it, with projection of the substance between them. The microscopical examination gave some extraordinary results. In the pia mater, penetrating into the fissures of the cord, were found a number of micro-organisms of very unequal length, varying in size from that of the tubercle bacillus to long filaments following all the flexions of the pia mater. The latter were formed by chains of individuals placed end to end with a clear space between. Branches were not observed, nor were the ends swollen. These filaments were found in the lumbar region in the substance of the spinal cord, particularly surrounding the blood vessels. Similar, but fewer, bodies were found in the medulla and in the cerebellum. In the brain itself the results were doubtful; a number of small granules staining deeply by methylene blue, but not by Gram, were found around the blood vessels. In no part of the central nervous system was there any trace of inflammatory reaction or accumulation of round cells. Cultures and inoculations were unfortunately not made; but the authors are convinced that the parasite belongs to the group of streptothriceæ. The symptoms presented by the patient resembled very closely those of Landry's ascending paralysis, and in the absence of inflammatory reaction, they assume that they were produced by the parasite in consequence of its mechanical inhibition of nervous action. The mode of entrance was probably by penetration of the mucous membrane during the attack of sore-throat. SAILER.

116. DER MORBUS BASEDOWII (Basedow's Disease). Schwerdt (Münchener Medicin. Wochenschrift, 1898, Nos. 42, 43 and 44, p. 1334 *et seq.*).

As the author himself admits, the title of his article is somewhat misleading, since its aim is to show that Basedow's disease, myxedema and sclerodema all have their starting-point in the condition, enteroplosis. This last he defines as a constitutional disease—which could be more correctly called "general atony"—whose most prominent symptom is a ptosis of the abdominal viscera. The disease depends upon an irritable weakness of the nervous system, congenital or acquired, bearing a close relationship to neurasthenia.

The alteration in intra-abdominal pressure, through weakness of the muscles of the abdominal walls, and the atony of the stomach and intestinal musculature, tend to cause a stasis in the flow of blood and lymph, digestive disturbances, abnormal fermentations, and autointoxication. There is gradually more and more disturbance of the circulation in the abdominal lymphatics, the valves of the thoracic duct finally become insufficient, and the chyle tends to pass into the external lymphatics and to mix with the body lymph, hence the tendency to lymph accumulation at certain points, and the production of localized edema, so common in Basedow's disease. By a further extension of this process, the author attempts to explain the production of exophthalmos, by lymph stasis in the orbital cavities.

On account of the circulatory disturbance, the heart becomes hypertrophied, and irritable, and beats more rapidly—the tachycardia. Finally the passages of toxins, and especially of the chyle through the thyroid gland—whose function, he thinks, is to separate from the blood, and to neutralize certain toxins—causes an irritation of the organ, hence a hypertrophy of it—the struma—and increased production of its thyreoantitoxin, so accounting for the other symptoms of Basedow's disease.

The process continuing, there are gradually produced induration and shrinking of the lymph glands, and changes in caliber of the larger lymph vessels, especially of the thoracic duct.

There is a tendency to dilatation of the lymph capillaries in certain regions, especially about the chest and upper extremity, and to accumulation there of mucoid material, causing local swellings. The thyroid gland atrophies, and ceases to functionate, and we have the clinical picture of myxedema. Sclerodema, which has many points of resemblance to myxedema, presents three stages, edema, induration, and atrophy.

Unlike in myxedema, the swelling does not spread to contiguous tissues, but occurs in independent foci. This, however, seems due to local causes, as injury, cold, rheumatism, etc. In both diseases, the author considers that there is a stasis of chyle and lymph, but while in myxedema this is mainly through obliteration of the thoracic duct, in sclerodema the obstruction is mainly in the lymph glands. The author quotes a number of authorities to support his opinions at certain points, but gives no post-mortem findings on which to base his theory, and relates no new facts. ALLEN.

117. ON FOUR OBSCURE CASES OF INTRACRANIAL DISEASE. H. J. Campbell (Brit. Med. Jour., 1898, No. 1970, p. 959).

CASE I. A spinner, aged nineteen, had had headache for four months, vomiting for two weeks and dragging of the right leg for two days before admission to hospital. The next day paralysis of the right arm, aphasia and impairment of sensation on the whole right side were added. The patient was restless and irritable and the inner edge of either disk was found to be somewhat blurred; temperature 99.2, pulse 84, respirations slightly accelerated. For two days his condition remained much the same, when he suddenly died.

The necropsy revealed a most unusual cause for the symptoms. The left cerebral hemisphere was softer and more friable than the right, but no gross lesion was discovered except a few tubercles on the vessels at the base. Doctor Eurich (a very competent man) made the microscopical examination and found numerous tubercle bacilli in the gray matter of the motor area. The hemiplegia was therefore apparently due to pressure upon the cortical cells by the inflammatory edema, caused by the presence of the micro-organisms in this region.

CASE II. A woman of thirty-three, for a period of fourteen weeks presented the symptoms of tumor of the pituitary body. On examination *post mortem* no tumor was found, but an inflammatory thickening, principally a pachymeningitis, in the region of the sella turcica. As "here and there there were evidences of caseation" the lesion was probably of tubercular or syphilitic origin.

CASE III. A boy of fifteen complained of slight headache, a few minutes later vomited, after walking home vomited again, and in